

Date: Fri, 29 Oct 93 04:30:18 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V93 #93
To: Ham-Ant

Ham-Ant Digest Fri, 29 Oct 93 Volume 93 : Issue 93

Today's Topics:

Broadcast AM antenna question
 Butternut Butterfly
Calibrating a Radio Shack SWR/POWER meter
 Coax termination blues. (2 msgs)
 Feeding and matching Yagis
 Nice simple HF ant

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 28 Oct 93 19:30:03 GMT
From: telenet!deceglie@uunet.uu.net
Subject: Broadcast AM antenna question
To: ham-ant@ucsd.edu

This is not really a ham question, but here goes.

I live in the Washington, DC area, and at night I sometimes can pick up a
broadcast AM station out of New York (1560 kHz). I really love the
programming, and there is no comparable format that broadcasts locally.
Oddly enough, my cheapo table radio picks it up better than my expensive
stereo receiver, yet not good enough.

Is there a home brew antenna solution that will enhance reception?
I prefer to hook it up to the stereo receiver, which currently uses
only a simple 300 ohm "T" for FM, and a helical coil for AM, that is
attached to the back of the receiver.

What about fading, and competing signals at the same frequency from other, more distant sources?

E-mail responses please.

Date: Wed, 27 Oct 93 18:09:22 GMT
From: tijc02!jkl141@uunet.uu.net
Subject: Butternut Butterfly
To: ham-ant@ucsd.edu

Date: Wed, 27 Oct 1993 16:46:17 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!spool.mu.edu!sgiblab!news.kpc.com!kpc!nat@network.ucsd.edu
Subject: Calibrating a Radio Shack SWR/POWER meter
To: ham-ant@ucsd.edu

Hi,

I am in the process of tuning a homebrew 3 element Yagi for 20m. My friend loaned me the much maligned Radio Shack SWR/Power meter :-). Unfortunately he has misplaced the instruction booklet that came with the meter. Could someone post the instructions of calibrating the meter. The front panel has a meter 3 switches and a knob. The switches are

1. Power level 20/200/2000
2. Mode Power/Cal/SWR
3. Power Mode PEP/AVG

The meter has power and swr markings on it. The SWR scale has marking starting from left at 1.0 to a red zone beyond the 3. At the end of the red zone is a red mark with "cal" on top of it.

Folks can start your flamethrowers after the calibration instructions have been posted. I don't want to lose the signal in the noise :-) :-).

--

Natarajan Gurumoorthy AB6SJ Kubota Pacific Computer, Inc.
nat@kpc.com 2630 Walsh Avenue
Phone 408 987 3341 Santa Clara, California 95051.

Date: 28 Oct 93 19:47:45 GMT
From: sdd.hp.com!col.hp.com!srngenprp!alanb@hplabs.hp.com
Subject: Coax termination blues.
To: ham-ant@ucsd.edu

ritterbus001@wsub.ctstateu.edu (ritterbus001@wsub.ctstateu.edu) wrote:

: I have read a couple of times (notably in the ARRL Antenna Handbook) than
: when preparing the ends of coax for termination, one should be very
: careful _not to nick the braid or center conductor_. The articles
: seemed most emphatic on this point, but did not elaborate, so it
: raises some questions with me.

I don't think it has anything to do with RF performance, but is simply
a question of mechanical strength. If you nick the center conductor or
the braid, it might break after being flexed a few times.

AL N1AL

Date: 28 Oct 93 12:50:56 GMT
From: ogicse!emory!rsiatl!ke4zv!gary@network.ucsd.edu
Subject: Coax termination blues.
To: ham-ant@ucsd.edu

In article <1993Oct27.195442.1@wsub.ctstateu.edu> ritterbus001@wsub.ctstateu.edu
writes:

>I have read a couple of times (notably in the ARRL Antenna Handbook) than
>when preparing the ends of coax for termination, one should be very
>careful _not to nick the braid or center conductor_. The articles
>seemed most emphatic on this point, but did not elaborate, so it
>raises some questions with me. Perhaps one of you veterans of
>the coax wars can shed some light on thie (Gary Coffman please read.)
>

>1) Why not? If I had to guess, I would guess that it had something
>to do with the skin effect, but this I may be wrong (I was once :-)
>How deep a cut is considered a "nick"? A couple of microns? One
>quarter of the radius?

It's nothing so exotic. It's just that a nick in the wire makes the
wire much more prone to *breaking* at that point after being flexed
a few times. How bad? If you can see the nick, or feel it with a
fingernail, it's too much.

>4) Those who have ever worked with coax know that theory and practice
>may diverge ("In theory, theory and practice are the same. In
>practice, they are not.") This begs the question, how can one

> strip this nasty stuff with ordinary tools, i.e., not spending
> a fortune on special strippers, etc.

Buying the proper stripper and dies is the best way. Paladin is good. It's a lifetime investment. However, you can do it with an ordinary pocketknife if the knife is sharp and you have a good "touch". I used a Buck Folding Hunter that I keep *very* sharp. I can slice through jacket, braid, and inner insulation without nicking the center conductor. I then make a second cut about 1/4 inch back from the first just getting the jacket. That will make it right for working with a BNC Kings crimp connector. It shouldn't take more than 10 seconds to properly strip and terminate a coax. N fittings take a couple seconds longer because they need a third cut to bare the inner insulation for a short distance between the bare inner conductor and the exposed braid.

Gary

--

Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

Date: Tue, 26 Oct 1993 18:58:20 GMT
From: pa.dec.com!oct17.dfe.dec.com!ryn.mro4.dec.com!est.enet.dec.com!
randolph@decwrl.dec.com
Subject: Feeding and matching Yagis
To: ham-ant@ucsd.edu

Anyone ever attempt any of the VHF Yagis in the Antenna Book? The feed is odd: the coax center conductor is tied to one leg of the driven element, then phased thru a 180 degree piece of coax to the other leg. I can't quite figure what happens to the braid. I guess this is a way of going from the unbalanced coax to a balanced feed for the Yagi...?

I decided to go with a gamma match on the 2m Yagi I'm building, as it seems to work well with coax feed. I was planning a hairpin match, but I'd need some sort of balun like the above to use that. I'll probably coil the coax to choke any RF coming down the shield. This was formerly a log-periodic TV antenna, so the driven element is split. I'll have to short across it to do the gamma match.

-Tom R. N100Q randolph@est.enet.dec.com

Date: Wed, 27 Oct 93 18:34:51 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!newsserver.jvnc.net!

a3bee2.radnet.com!cyphyn!randy@network.ucsd.edu
Subject: Nice simple HF ant
To: ham-ant@ucsd.edu

This ant will do 80 --- 10Mtrs (good enough to please me, anyway...)

[illegible]

All this starts at a window, where an insulator is put, to support the wire.

As the house has aluminum siding, I've INCLUDED it as part of the usual gnd system (gnd rod, water pipe connects)

L tuner is this ckt (home brew, but a regular PI NET tuner will work too)

coax	
jack	Adj coil and cap for least SWR for each band.
S0-234	

```
(*)-----uuuuuuuuuu-----+-----o to wire  
|      0-30uh                |  
|      adj. coil              |  
|                              |  
|                              |  
|                              |  
|                              |  
|          _|_|/  
|          --- 160 uuf variable cap ( Fair Radio Sales co.)  
|          /|  
|          o to gnd sys
```

Coil could be a rotary inductor, but I used tap connections and a switch to select each tap
160 uuf can be as small as 100 uuf or as big as 250 uuf...BUT must be rated for 2000 volts or more so you don't flash-over.

RFI is not a big thing, due to USING alum. siding as PART of my gnd sys. and so (apparently) act as a shield.

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--
Randy KA1UNW           If you get a shock while
                        servicing your equipment,           "Works for me!"
randy@192.153.4.200    DON'T JUMP!                           -Peter Keyes
                        You might break an expensive tube!
```

Date: (null)

From: (null)

--

-John LeRoy

email: tijc02!jceng1!jkl141@uunet.uu.net

phone: 1-404-509-9851

End of Ham-Ant Digest V93 #93
